REMARKS

Formal Matters

As a preliminary matter, Applicants note with appreciation that the Examiner for initialing and considering the references listed on the PTO/SB/08 form submitted with the Information Disclosure Statement on April 30, 2001.

Claims 1-35 are all of the pending claims. Claims 1, 6, 11, 16, 21, 24, and 27 are independent claims. New dependent claims 30-35 have been added.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-7, 9-12, 14-17, and 19-29 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hanaoka (US 4,208,869) in view of newly cited Kishita et al. (US 6,064,158). Claims 8, 13, and 18 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Hanaoka in view of Kishita, and in further view of Skeki et al. (JP 2000-047638).

Independent Claims 1, 6, 21, and 24

With respect to independent claims 1, 6, 21, and 24, Applicants respectfully traverse the rejection at least because the combination of Hanaoka and Kishita does not teach or suggest all of the claim recitations. For example, the combination of Hanaoka and Kishita does not teach or suggest the claimed EL device driving device or method having the recited first and second AC power supplies, in which the second power supply supplies an AC waveform having the same waveform as the AC voltage supplied from the first AC power supply and shifted in phase 180 degrees.

It is the Examiner's position that Kishita discloses all of missing features of Kishita. However, according to the rejection, the Examiner is misapplying the teachings of Kishita.

Kishita discloses several embodiments of an electroluminescent display device. In a first embodiment of the display device shown in Fig. 1, scan voltage power supply circuits 5 and 6 supply voltages to scan electrodes 201, 301, 202, 302 of the EL elements, and data voltage power supply 7 supplies a voltage to data electrodes 401, 402, 403. It appears that the Examiner asserts that the data voltage power supply 7 corresponds to one of the recited AC power supplies. However, the data voltage power supply 7 cannot correspond to one of the AC power supplies because the power supply 7 merely provides a voltage Vm to the data driver IC 4. Kishita at Fig. 1. Based on this supply voltage, a voltage of either Vm or a ground voltage to the data electrode 401. Kishita at Fig. 3I. As such, the power supply 7 of Kishita cannot be considered an AC power supply because it does not provide currents having reversed polarities.

In addition, in a second embodiment of the display device shown in Fig. 5, the power supply 7 similarly outputs either positive voltages Vm, Vm-V02, or V02, or a ground voltage to the IC 4. Kishita at 8:41-43. As such, this power supply 7 of Kishita also cannot be considered an AC power supply because it does not provide currents having reversed polarities.

Furthermore, Kishita discusses an alternative embodiment shown in Fig. 15 in which the voltage applied to the scan electrode is Vr, -Vr+Vm, or a ground voltage and the data electrode is supplied with a voltage of Vm or ground. Kishita at 13:59-61. Again, this data electrode power supply cannot be considered an AC power supply because it does not provide currents having reversed polarities.

Finally, Kishita mentions that it would be acceptable to modify the embodiment of Fig. 13 so that the scan electrode is supplied with a voltage of Vr,-Vm/2, or -Vr,+Vm/2, and the data electrode is supplied with a voltage of Vm/2 or Vm/2. Kishita at 13:62-65. However, the data electrode voltage supply cannot be considered the claimed "second power supply" at least because the waveform of the data electrode power supply is not the same as the waveform of the scan power supply (first power supply). Instead the amplitude of the supplied voltages is different.

In view of the above, Applicants respectfully request the Examiner to withdraw the rejection of independent claims 1, 6, 21, and 24 for at least the reasons discussed above. In addition, Applicants request the Examiner to withdraw the rejection of dependent claims 2-5, 7, 9, 10, 22, 23, 25, 26 at least because of their dependency from one of claims 1, 6, 21, and 21. In addition, Applicants respectfully request the Examiner to withdraw the rejection of dependent claim 8 at least because of its dependency from claim 6 and because Skeki (which the Examiner cites in an attempt to show a plurality of EL devices) does not cure the deficiencies in the combination of Hanaoka and Kishita discussed above.

Independent Claim 11

With respect to independent claim 11, Applicants have amended claim 11 with respect to Kishita.

Claim 11 is directed to an EL device driving device having *inter alia* a discrete AC power supply for supplying an AC voltage without superposition of direct current, wherein the AC voltage is a sinusoidal waveform. Applicants respectfully request the Examiner to withdraw the

rejection of claim 11 at least because the combination of Hanaoka and Kishita does not teach or suggest all of the recitations of the claimed EL device driving device.

For example, although Kishita's scan electrode is supplied with a voltage of Vr,-Vm/2 or -Vr,+Vm/2 and Kishita's data electrode is supplied with a voltage of Vm/2 or Vm/2 (*See* Kishita at 13:62-65), Kishita does not teach or suggest that the supplied voltage is a sinusoidal waveform.

Therefore, Applicants respectfully request the Examiner to withdraw the rejection of independent claim 11, and also withdraw the rejections of dependent claims 12-15.

Independent Claim 16

With respect to independent claim 16, Applicants respectfully traverse the rejection at least because the combination of Hanaoka and Kishita do not teach or suggest all of the claim recitations. For example, the combination of Hanaoka and Kishita do not teach or suggest the claimed EL device driving device having a discrete EL driving circuit with diodes connected to one electrode of EL device in which the energizing of the diodes allows current to pass to or from an AC power supply connected to the other electrode of the EL device. Instead, the scan control circuits 2, 3, control the supply of power to the scan electrode and the data control circuit 4 controls the supply of power to the scan electrode. Kishita at Fig. 13.

In view of the above, Applicants respectfully request the Examiner to withdraw the rejection of independent claim 16 for at least the reasons discussed above. In addition, Applicants respectfully requesting the Examiner to withdraw the rejection of dependent claims 17, 19, and 20 at least because of their dependency from claim 16, and to withdraw the rejection

of dependent claim 13 at least because of its dependency from claim 11 and because Skeki (which the Examiner cites in an attempt to show a plurality of EL devices) does not cure the deficiencies in the combination of Hanaoka and Kishita discussed above.

Independent Claim 27

With respect to independent claim 27, Applicants respectfully traverse the rejection at least because the combination of Hanaoka and Kishita do not teach or suggest all of the claim recitations. For example, the combination of Hanaoka and Kishita do not teach or suggest the claimed EL device driving method in which an EL driving device on the other electrode side of an EL device passes current from a power supply to one electrode of the EL device when the AC voltage is positive and passes current from the EL device to the AC power supply when the AC power supplied is lower than ground potential. As is discussed above with respect to claim 16, instead, Kishita's scan control circuits 2, 3, control the supply of power to the scan electrode and the data control circuit 4 controls the supply of power to the scan electrode. Kishita at Fig. 13.

In view of the above, Applicants respectfully request the Examiner to withdraw the rejection of independent claim 27 for at least the reasons discussed above. In addition, Applicants request the Examiner to withdraw the rejection of dependent claims 28 and 29 at least because of their dependency from claim 27.

New Claims

In addition, in order to provide additional claim scope, Applicants have added new dependent claims 30-36, depend from independent claims 1, 6, 11, 16, 21, 24, and 27, respectively, and would further recite that the supplied AC voltage (or voltages) is "a sinusoidal

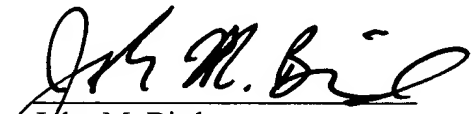
waveform". Applicants respectfully request the Examiner to allow these claims at least because of their dependency from one of claims 1, 6, 16, 21, 24, and 27.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



John M. Bird
Registration No. 46,027

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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